Amendment to and Listing of the Claims:

Please cancel claim 10, without prejudice, and withdrawn claims 12, 18, 32, and 50, without prejudice to their inclusion in one or more related applications. Please amend claims 4, 5, 11 and 17 as indicated in the listing of the claims below.

1. (Original) A method of generating a differentiated human cell of a selected type, the method comprising maintaining an isolated human KDR^+ stem cell in the presence of a differentiated mammalian cell of the selected type, whereby the stem cell differentiates to become the differentiated human cell of the selected type.

2. (Original) The method of claim 1, wherein the stem cell is maintained in contact with the differentiated mammalian cell.

3. (Original) The method of claim 1, wherein the stem cell is maintained in vitro in the presence of the differentiated mammalian cell.

4. (Currently Amended) The method of claim 1, wherein the stem cell is separated from the differentiated mammalian cell by a porous barrier, the barrier having pores of a size sufficient to allow the passage of ~~small proteins but not the stem cell or the mammalian cell~~ molecules having a molecular weight less than 50,000 through the pores.

5. (Currently Amended) The method of claim 1, wherein the stem cell is isolated from a human hematopoietic tissue using ~~a reagent~~ an antibody that specifically binds with KDR.

6. (Original) The method of claim 5, wherein tissue is selected from the group consisting of an embryonic tissue, a fetal tissue, and a post-natal tissue.

7. (Original) The method of claim 5, wherein the tissue is an embryonic tissue selected from the group consisting of the aorta-gonad-mesonephros region tissue, yolk sac, and embryonic liver.

8. (Original) The method of claim 5, wherein the tissue is a fetal tissue selected from the group consisting of liver, bone marrow, and peripheral blood.

9. (Original) The method of claim 5, wherein the tissue is a post-natal tissue selected from the group consisting of cord blood, bone marrow, normal peripheral blood, mobilized peripheral blood, a hepatic tissue, and a splenic tissue.

10. (Canceled)

11. (Original) The method of claim ~~10~~ 5, wherein the antibody is selected from the group consisting of KDR1 and KDR2.

12. (Canceled)

13. (Original) The method of claim 1, wherein the differentiated mammalian cell is a human cell.

14. (Original) The method of claim 1, wherein the differentiated mammalian cell is a cell of ectodermal origin.

15. (Original) The method of claim 1, wherein the differentiated mammalian cell is a cell of mesodermal origin.

16. (Original) The method of claim 1, wherein the differentiated mammalian cell is a cell of endodermal origin.

17. (Currently Amended) The method of claim 1, wherein the differentiated mammalian cell is selected from the group consisting of a skeletal muscle cell, ~~a myocardial cell, an epithelial cell,~~ an endothelial cell~~, a cartilage cell, a retinal cell, a lens cell, a bone cell, a fat cell, a peripheral nerve cell,~~ and a differentiated hematopoietic cell~~, a marrow stromal cell, a hepatocyte, a splenocyte, a keratinocyte, a fibroblast, a lymphoid cell, and a central nervous system cell~~.

18. to 45. (Canceled)

46. (Original) A method of generating a differentiated human cell of a selected type, the method comprising maintaining an isolated human KDR^+ stem cell in a medium conditioned to reflect the presence of differentiated mammalian cells of the selected type in the medium, whereby the stem cell differentiates to become the differentiated human cell of the selected type.

47. to 53. (Canceled)

54. (Original) A method of rejuvenating an age-damaged human tissue, the method comprising

i) maintaining an isolated human KDR^+ stem cell in a medium conditioned to reflect the presence of differentiated mammalian cells of the same type as the damaged tissue, whereby the stem cell differentiates to become an altered cell selected from the group consisting of a tissue-exposed stem cell, a precursor of a cell of the same type as the damaged tissue, and a terminally differentiated cell of the same type as the damaged tissue; and

ii) providing the altered cell to the age-damaged tissue, thereby rejuvenating the tissue.

55. to 89. (Canceled)